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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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of

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Complete if Known

Application Number	10/609,298
Filing Date	June 27, 2003
First Named Inventor	Sommadossi <i>et al.</i>
Group Art Unit	1623
Examiner Name	Unassigned
Attorney Docket Number	06171.105059 IDX 1017

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U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/Relevant Figures Appear	T ⁶
		Number	Kind Code (if known)				
TM	AA	3,798,209		Wilkowski, <i>et al.</i>	03-19-1974		
	AB	RE29,835		Witkowski <i>et al.</i>	11-14-1978		
	AC	4,522,811		Eppstein <i>et al.</i>	06-11-1985		
	AD	4,957,924		Beauchamp	09-18-1990		
	AE	5,149,794		Yatvin <i>et al.</i>	09-22-1992		
	AF	5,157,027		Biller <i>et al.</i>	10-20-1992		
	AG	5,194,654		Hostetler <i>et al.</i>	03-16-1993		
	AH	5,223,263		Hostetler <i>et al.</i>	06-29-1993		
	AI	5,256,641		Yatvin <i>et al.</i>	10-26-1993		
	AJ	5,411,947		Hostetler <i>et al.</i>	05-02-1995		
	AK	5,463,092		Hostetler <i>et al.</i>	10-31-1995		
	AL	5,543,389		Yatvin <i>et al.</i>	08-06-1996		
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TM	AP	6,312,662	B1	Erion <i>et al.</i>	11-06-2001		

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TM	AQ	DE	3,512,781	A1	Soc. Nat. Elf Aquitaine	10-17-1985		
	AR	EP	0,180,276	B1	Stamicarbon B.V.	12-19-1988		
	AS	EP	0,350,287	B1	Chimerix	09-27-2000		
	AT	EP	0,650,371	B1	State of Oregon	11-15-2000		
	AU	WO	89/02733	A1	Regents of the Univ. of California	04-06-1989		
	AV	WO	90/00555	A1	Vical Inc.	01-25-1990		
TM	AW	WO	91/16920	A1	Vical Inc.	11-14-1991		

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/Traviss McIntosh III/ (07/24/2006)

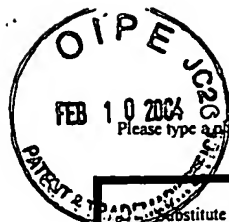
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TM	BA	WO	91/18914	A1	Vical Inc.	12-12-1991		
	BB	WO	91/19721	A1	Glazier	12-26-1991		
	BC	WO	93/00910	A1	Vical Inc.	01-21-1993		
	BD	WO	94/26273	A1	Hostetler	11-24-1994		
	BE	WO	96/15132	A1	Regents of the Univ. of California	05-23-1996		
	BF	WO	99/15194	A1	Schering Corporation	04-01-1999		
	BG	WO	99/43691	A1	Emory; U. Georgia Res. Found.	09-02-1999		
	BH	WO	99/45016	A2	Metabasis Therapeutics Inc.	09-10-1999		
	BI	WO	99/59621	A1	Schering Corporation	11-25-1999		
	BJ	WO	99/64016	A1	Hoffman-La Roche AG	12-16-1999		
	BK	WO	00/24355	A1	Smith & Nephew Kinetic	05-04-2000		
	BL	WO	00/37110	A2&3	Schering Corporation	06-29-2000		
	BM	WO	00/52015	A2&3	Metabasis Therapeutics	09-08-2000		
	BN	WO	01/18013	A1	Metabasis Therapeutics	03-15-2001		
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	BT	WO	01/90121	A2&3	Novirio (Idenix); Univ. ... Cagliari	11-29-2000		
	BU	WO	01/92282	A2&3	Novirio (Idenix); Univ. ... Cagliari	06-12-2001		
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	BX	WO	02/057425	A2	Merck; Isis Pharmaceuticals	07-25-2002		
	BY	WO	02/18404	A2&3	Hoffman-La Roche AG	03-07-2002		
	BZ	WO	02/32414	A2&3	Schering Corporation	04-25-2002		
	BAA	WO	02/32920	A2	Pharmasset	04-25-2002		
	BAB	WO	02/48165	A2&3	Pharmasset	06-20-2002		
TM	BAC	WO	03/024461	A1	Schering Corporation	03-27-2003		

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/Traviss McIntosh III/ (07/24/2006)

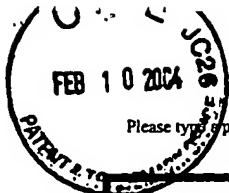
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		Office ²	Number	Kind Code ³ (if known)				
TM	CA	WO	04/003138	A2	Merck & Co., Isis Pharmaceutical	01-08-2004		
duplicate	CB	WO	04/003138	A2	Merck & Co., Isis Pharmaceutical	01-22-2004		
TM	CC	WO	04/009020	A2	Merck & Co., Isis Pharmaceutical	01-29-2004		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

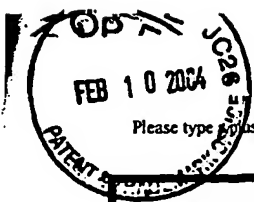
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
TM	CD	BAGINSKI, S. G. <i>et al.</i> , "Mechanism of action of a pestivirus antiviral compound," <i>PNAS USA</i> , 97(14): 7981-7986 (2000).	
	CE	BATTAGLIA, A.M. <i>et al.</i> , "Combination Therapy with Interferon and Ribavirin in the Treatment of Chronic Hepatitis C Infection", <i>Ann. Pharmacother.</i> , 34:487-494 (2000).	✓
	CF	BERENGUER, M. <i>et al.</i> , "Hepatitis C virus in the transplant setting", <i>Antivir. Ther.</i> , 3 (Suppl 3):125-136 (1998).	✓
	CG	BERMAN, E. <i>et al.</i> , "Synergistic cytotoxic effect of azidothymidine and recombinant interferon alpha on normal human bone marrow progenitor cells," <i>Blood</i> , 74(4):1281-1286 (1989)	
	CH	BHAT <i>et al.</i> (Oral Session V, Hepatitis C Virus, Flaviviridae, 2003 (Oral Session V, Hepatitis C Virus, Flaviviridae; 16 th International Conference on Antiviral Research (April 27, 2003, Savannah, Ga.); p A75).	✓
	CI	BROWNE, M.J., <i>et al.</i> , "2',3'-didehydro-3'-deoxythymidine (d4T) in patients with AIDS or AIDS-Related Complex: A Phase I trial," <i>J. Infect. Dis.</i> , 167(1):21-29 (1993).	✓
	CJ	COLACINO, J. M., "Review article: Mechanisms for the anti-hepatitis B virus activity and mitochondrial toxicity of fialuridine (FIAU)," <i>Antiviral Res.</i> , 29(2-3): 125-39 (1996).	✓
	CK	CUI, L., <i>et al.</i> , "Cellular and molecular events leading to mitochondrial toxicity of 1-(2-deoxy-2-fluoro-1-β-D-arabinofuranosyl)-5-iodouracil in human liver cells," <i>J. Clin. Invest.</i> , 95:555-563 (1995).	✓
	CL	DAVIS, G.L., "Current therapy for chronic Hepatitis C," <i>Gastroenterology</i> 118:S104-S114 (2000).	✓
↓	CM	De FRANCESCO, R., <i>et al.</i> , "Approaching a new era for hepatitis C virus therapy: inhibitors of the NS3-4A serine protease and the NSSB RNA-dependent RNA polymerase," <i>Antiviral Research</i> , 58: 1-16 (2003).	✓
TM	CN	De LOMBAERT, S., <i>et al.</i> , "N-Phosphonomethyl dipeptides and their phosphonate prodrugs, a new generation of neutral endopeptidase (NEP, EC 3.4.24.11) inhibitors," <i>J. Med. Chem.</i> , 37:498-511 (1994).	✓

Examiner Signature	/Traviss McIntosh III/ (07/24/2006)	Date Considered	07/24/2006
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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

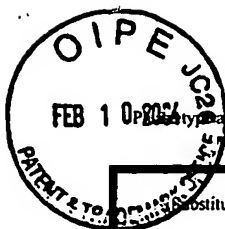
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
TM	DA	DORNSIFE, R.E., <i>et al.</i> , "In vitro potency of inhibition by antiviral drugs of hematopoietic progenitor colony formation correlates with exposure at hemotoxic levels in Human Immunodeficiency Virus-positive humans," <i>Antimicrob. Agents Chemother.</i> , 40(2):514-519 (1996).	✓
	DB	DYMOCK, B.W., <i>et al.</i> , "Review: Novel approaches to the treatment of hepatitis C virus infection," <i>Antiviral Chemistry & Chemotherapy</i> , 11(2):79-95 (2000).	
	DC	ELDRUP <i>et al.</i> (Oral Session V, Hepatitis C Virus, Flaviviridae; 16 th International Conference on Antiviral Research (April 27, 2003, Savannah, Ga.).	✓
	DD	FARKAS, J., <i>et al.</i> , "Nucleic acid components and their analogues. XCIV. Synthesis of 6-amino-9-(1-deoxy-β-D-psicofuranosyl)purine", <i>Collect. Czech. Chem. Commun.</i> 32:2663-2667 (1967).	✓
	DE	FARKAS, J., <i>et al.</i> , "Nucleic acid components and their analogues. LXXIX. Synthesis of methyl 1-deoxy-D-psicofuranosides substituted at C ₁₁ with halo atoms or a mercapto group," <i>Collect. Czech. Chem. Commun.</i> , 31:1535-1543 (1996).	✓
	DF	FARQUHAR, D., <i>et al.</i> , "Synthesis and biological evaluation of neutral derivatives of 3-fluoro-2'-deoxyuridine 5'-phosphate," <i>J. Med. Chem.</i> 26: 1153 (1983); 1153 - 1158.	✓
	DG	FARQUHAR, D., <i>et al.</i> , "Synthesis and biological evaluation of 9-[5'-(2-oxo-1,3,2-oxazaphosphorinan-2-yl)-β-D-arabinosyl]adenine and 9-[5'-(2-oxo-1,3,2-dioxazaphosphorinan-2-yl)-β-D-arabinosyl]adenine: Potential neutral precursors of 9-[β-D-arabinofuranosyl]adenine 5'-monophosphate," <i>J. Med. Chem.</i> 28:1358-1381 (1985).	✓
	DH	FERRARI R., <i>et al.</i> , "Characterization of soluble hepatitis C virus RNA-dependent RNA polymerase expressed in <i>Escherichia coli</i> ," <i>Journal of Virology</i> , 73(2), 1649-1654 (1999).	✓
	DI	FISCHL, M.A., <i>et al.</i> , "Zalcitabine compared with zidovudine in patients with advanced HIV-1 infection who received previous zidovudine therapy," <i>Ann. Intern. Med.</i> , 18(10):762-769 (1993).	✓
	DJ	FREED, J.J., <i>et al.</i> , "Evidence for acyloxymethyl esters of pyrimidine 5'-deoxyribonucleotides as extracellular sources of active 5'-deoxyribonucleotides in cultured cells," <i>Biochemical Pharmacology</i> . 38:3193-3198 (1989).	✓
	DK	GUNIC, E., <i>et al.</i> , "Synthesis and cytotoxicity of 4'-C- and 5'-C-substituted Toyocamycins," <i>Bioorg. Med. Chem.</i> , 9:163-170 (2001).	✓
✓	DL	HARRY-O'KURU, R.E., J.M. Smith, and M.S. Wolfe, "A short, flexible route toward 2'-C-branched ribonucleosides", <i>J. Org. Chem.</i> 62, 1754-1759 (1997). (Scheme 11).	✓
TM	DM	HOSTETLER, K.Y., <i>et al.</i> , "Synthesis and antiretroviral activity of phospholipids analogs of azidothymidine and other antiviral nucleosides," <i>J. Biol. Chem.</i> , 265:6112-6117 (1990)	✓

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TM	EA	HOSTETLER, K.Y., <i>et al.</i> , "Greatly enhanced inhibition of Human Immunodeficiency Virus Type I replication in CEM and HT4-6C cells by 3'-deoxythymidine diphosphate dimyristoylglycerol, a lipid prodrug of 3'-deoxythymidine," <i>Antimicrob. Agents Chemother.</i> , 36:2025-2029 (September 1992).	✓
	EB	HUNSTON, R.N., <i>et al.</i> , "Synthesis and biological properties of some cyclic phosphotriesters derived from 2'-deoxy-5-fluorouridine," <i>J. Med. Chem.</i> 27:440-444 (1984).	✓
	EC	JONES, G. H.; Moffatt, J. G., <i>Methods in Carbohydrate Chemistry</i> ; Whisler, R. L. and Moffatt, J. L. Eds; Academic Press: New York, 1972; 315-322	✓
	ED	JONES, G. H., <i>et al.</i> , "4'-substituted nucleosides. 5. Hydroxymethylation of nucleoside 5'-aldehydes," <i>J. Org. Chem.</i> , 44:1309-1317 (1979).	✓
	EE	KHAMNEI, S., "Neighboring group catalysis in the design of nucleotide prodrugs," <i>J. Med. Chem.</i> , 39:4109-4115 (1996).	✓
	EF	KUCERA, L.S., <i>et al.</i> , "Novel membrane-interactive ether lipid analogs that inhibit infectious HIV-1 production and induce defective virus formation," <i>AIDS Res. Hum. Retro Viruses</i> , 6:491-501 (1990).	✓
	EG	KURTZBERG J., <i>et al.</i> , "Differential toxicity of carbovir and AZT to human bone marrow hematopoietic progenitor cells in vitro," <i>Exp. Hematol.</i> , 18(10):1094-1096 (1990).	✓
	EH	LEONARD, N. J., <i>et al.</i> , "5-Amino-5-deoxyribose derivatives. Synthesis and use in the preparation of "reversed" nucleosides" <i>J. Heterocycl. Chem.</i> , 3:485-489 (December 1966).	✓
	EI	LERZA, R., <i>et al.</i> , "In vitro synergistic inhibition of human bone marrow hemopoietic progenitor growth by a 3'-azido-3'-deoxy-thymidine, 2',3'-dideoxycytidine combination," <i>Exp. Hematol.</i> , 25(3):252-255 (1997).	✓
	EJ	LEWIS W., <i>et al.</i> , "Zidovudine induces molecular, biochemical, and ultrastructural changes in rat skeletal muscle mitochondria," <i>J. Clin. Invest.</i> , 89(4):1354-1360 (1992).	✓
	EK	LEWIS, L. D., <i>et al.</i> , "Ultrastructural changes associated with reduced mitochondrial DNA and impaired mitochondrial function in the presence of 2'3'-dideoxycytidine," <i>Antimicrob. Agents Chemother.</i> , 36(9):2061-2065 (1992).	✓
	EL	LEWIS, W., <i>et al.</i> , "Fialuridine and its metabolites inhibit DNA polymerase γ at sites of multiple adjacent analog incorporation, decrease mtDNA abundance, and cause mitochondrial structural defects in cultured hepatoblasts," <i>Proceedings of the National Academy of Sciences, USA</i> , 93(8): 3592-7 (1996).	✓
✓	EM	LOHMANN V., <i>et al.</i> , "Biochemical and kinetic analyses of NS5B RNA-dependent RNA polymerase of the Hepatitis C virus," <i>Virology</i> , 249, 108-118 (1998).	✓
TM	EN	LUH, T.-Y., <i>et al.</i> , "A convenient method for the selective esterification of amino-alcohols," <i>Synthetic Communications</i> , 8(5):327-333 (1978).	✓

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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6 of 7

Complete if Known	
Application Number	10/609,298
Filing Date	June 27, 2003
First Named Inventor	S mmadosi et al.
Group Art Unit	1623
Examiner Name	Unassigned
Attorney Docket Number	06171.105059 IDX 1017

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
TM	FA	MCCORMICK, J., et al., "Structure and total synthesis of HF-7, a neuroactive glyconucleoside disulfate from the funnel-web spider <i>Hololena curta</i> ," <i>J. Am. Chem. Soc.</i> , 121(24), 5661-5664 (1999).	✓
	FB	MCKENZIE, R., et al., "Hepatic failure and lactic acidosis due to fialuridine (FIAU), an investigational nucleoside analogue for chronic hepatitis B," <i>N. Engl. J. Med.</i> , 333(17):1099-1105 (1995).	✓
	FC	MEDINA, D. J., et al., "Comparison of mitochondrial morphology, mitochondrial DNA content, and cell viability in cultured cells treated with three anti-Human Immunodeficiency Virus dideoxynucleosides," <i>Antimicrob. Agents Chemother.</i> , 38(8):1824-8 (1994).	✓
	FD	MEIER, C., et al., "Cyclic saligenyl phosphotriesters of 2',3'-dideoxy-2',3'-didehydrothymidine (d4T) – A new pro-nucleic approach," <i>Bioorganic & Med. Chem. Letters</i> 7(2):99-104 (1997).	✓
	FE	MEYER, R.B., Jr., et al., "2'-O-Acyl-6-thioinosine cyclic 3',5'-phosphates as prodrugs of thioinosinic acid," <i>J. Med. Chem.</i> 22: 811-815 (1979).	✓
	FF	NEIDLEIN, R., et al., "Mild preparation of 1-benzoyloxyiminoalkylphosphonic dichlorides: Application to the synthesis of cyclic phosphonic diesters and cyclic monoester amides," <i>Heterocycles</i> 35:1185-1203 (1993).	✓
	FG	NUTT, R.F., et al., "Branched-chain sugar nucleosides. III. 3'-C-methyladenine", <i>J. Org. Chem.</i> , 33:1789-1795 (1968).	✓
	FH	OLSEN, et al. (Oral Session V, Hepatitis C Virus, Flaviviridae; 16 th International Conference on Antiviral Research (April 27, 2003, Savannah, Ga.) p A76).	✓
	FH	PAN-ZHOU, X-R, et al., "Differential effects of antiretroviral nucleoside analogs on mitochondrial function in HepG2 cells," <i>Antimicrob. Agents Chemother.</i> 44:496-503 (2000).	✓
	FJ	PIANTADOSI, C., et al., "Synthesis and evaluation of novel ether lipid nucleoside conjugates for anti-HIV-1 activity," <i>J. Med. Chem.</i> 34:1408-1414 (1991).	✓
	FK	RICHMAN, D.D., et al., "The toxicity of azidothymidine (AZT) in the treatment of patients with AIDS and AIDS-Related Complex," <i>N. Engl. J. Med.</i> , 317(4):192-197 (1987).	✓
	FL	SOMMADOSSI J-P, et al., "Comparison of cytotoxicity of the (-)- and (+)- enantiomer of 2',3'-dideoxy-3'-thiacytidine in normal human bone marrow progenitor cells," <i>Biochemical Pharmacology</i> 44(10):1921-1925 (1992).	✓
↓	FM	SOMMADOSSI J.-P., et al., "Toxicity of 3'-azido-3'-deoxythymidine and 9-(1,3-dihydroxy-2-propoxymethyl)guanine for normal human hematopoietic progenitor cells in vitro," <i>Antimicrobial Agents and Chemotherapy</i> , 31:452-454 (1987).	✓
TM	FN	STARRETT, J.E.Jr., et al., "Synthesis, oral bioavailability determination, and in vitro evaluation of prodrugs of the antiviral agents 9-(2-(phosphonomethoxy)ethyl)adenine (PMEA)," <i>J. Med. Chem.</i> 37: 1857-1864 (1994).	

Examiner Signature	/Traviss McIntosh III/ (07/24/2006)	Date Considered	07/24/2006
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of

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Application Number	10/609,298
Filing Date	June 27, 2003
First Named Inventor	S mmadosi <i>et al.</i>
Group Art Unit	1623
Examiner Name	Unassigned
Attorney Docket Number	06171.105059 IDX 1017

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
TM	GA	WEINBERG, R.S., <i>et al.</i> , "Effect of antiviral drugs and hematopoietic growth factors on <i>in vitro</i> erythropoiesis," <i>Mt. Sinai J. Med.</i> 1998;65(1):5-13.	✓
TM	GB	YARCHOAN, R., <i>et al.</i> "Long-term toxicity / activity profile of 2',3'-dideoxyinosine in AIDS or AIDS-related complex," <i>The Lancet</i> , 336(8714):526-529 (1990).	✓
TM	GC	YOSHIDA Y, <i>et al.</i> , "Reversal of azidothymidine-induced bone marrow suppression by 2',3'-dideoxythymidine as studied by hemopoietic clonal culture," <i>AIDS Res. Hum. Retroviruses</i> , 6(7):929-932 (1990).	✓
TM	GD	ZON, G., "Cyclophosphamide Analogues," Chapter 4 in <i>Progress in Medicinal Chemistry</i> , Vol. 19, G.P. Ellis and G.B. West, Eds., pp. 205-246 (1982).	✓

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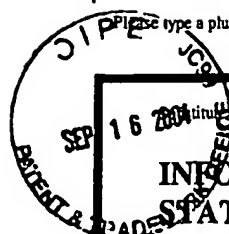
Examiner Signature	/Traviss McIntosh III/ (07/24/2006)	Date Considered	07/24/2006
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STATEMENT BY APPLICANT**

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Sheet 1 of 3

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Application Number	10/609,298
Filing Date	June 27, 2003
First Named Inventor	Sommadossi et al.
Group Art Unit	1623
Examiner Name	Unassigned
Attorney Docket Number	06171.105059 IDX 1017

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U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pp., Columns, Lines, Where Relevant Passages/Relevant Figures Appear	T ⁶
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FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pp., Columns, Lines, Where Relevant Passages/ Relevant Figures Appear	T ⁶
		Office ²	Number	Kind Code ³ (if known)				
TM	AA	EP	0 747 389		Taiho Pharmaceutical Co.	12-11-1996		
TM	AB	GB	1 163 102		MERCK & Co.	09-04-1969		
TM	AC	GB	1 163 103		MERCK & Co.	09-04-1969		
TM	AD	GB	1 209 654		MERCK & Co.	10-21-1970		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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TM	AE	AWANO, H. et al., "Synthesis and Antiviral Activity of 5-Substitute (2'S)-2'-C-Methylcytidines and -Uridines ¹¹¹ " Nucleosides and Nucleoties, Part 144 ARCHIV DER PHARMAZIE, VCH VERLAGSGESELLSCHAFT MBH, WEINHEIM, DE, Vol. 329, 01 February 1996 (1996-02-01), pp. 66-72	
TM	AF	BEIGELMAN et al., "A General Method for Synthesis of 3'-C-Alkyl nucleosides" Nucleic Acids Symposium. Series No. 9., IRL Press, Oxford, GB, Vol. 9, no. 9, 06 September 1981 (1981-09-06), pp. 115-118	
TM	AG	CAPPELLACCI, et al. "Ribose-Modified Nucleosides as Ligands for Adenosine Receptors: Synthesis, Conformational Analysis, and Biological Evaluation of 1'-C-Methyl Adenosine Analogues Journal Of Medicinal Chemistry, American Chemical Society, 45. pp. 1196-1202	
DUPLICATE	AH	FARKAS, J. et al., Nucleic Acids Components and Their Analogues. XCIV. Synthesis of 6-Amino-9(1-Deoxy-Beta-D Psicofuranosyl) P Urine, Collection of Czechoslovak Chemical Communications, Academic Press, London GB, Vol. 32, no. 7, 1967, pp. 2663-2667	

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		Application Number	10/609,298	
		Filing Date	June 27, 2003	
		First Named Inventor	Sommadossi <i>et al.</i>	
		Group Art Unit	1623	
		Examiner Name	Unassigned	
2	of	3	Attorney Docket Number	06171.105059 IDX 1017

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

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TM	BA	FEDEROV, I.I., <i>et al.</i> , "3'-C-Branched 2'-Deoxy-5-Methyluridines: Synthesis, Enzyme Inhibition, and Antiviral Properties" Journal of Medicinal Chemistry, American Chemical Society, Washington, US, Vol. 35, 1992, pp. 4567-4575	
TM	BB	FRANCHETTI, P., <i>et al.</i> , "2'-C-Methyl Analogues Of Selective Adenosine Receptor Agonists: Synthesis And Binding Studies", Journal of Medicinal Chemistry, American Chemical Society, Washington, US, Vol. 41, 1998, pp. 1708-1715	
TM	BC	HARRY O'KURU <i>et al.</i>, "A Short, Flexible Route Toward 2'-C-Branched Ribonucleosides" Journal of Org. Chemistry, American Chemical Society, Vol. 62, pp. 1754-1759	
TM	BD	H. HATTORI, <i>et al.</i> , "Nucleosides and Nucleotides 158" Journal of Medicinal Chemistry, American Chemical Society, Vol. 39, 1996, pp. 5005-5001	
TM	BE	HREBABECKY, H. <i>et al.</i> , "Nucleic Acid Components and their Analogues. CXLIX. Synthesis of Pyrimidine Nucleosides Derived from 1-Deoxy-D-Psicose", Collection of Czechoslovak Chemical Communications, Academic Press, London, GB, Vol. 37, 1972, pp. 2059-2065	
TM	BF	HREBABECKY, H. <i>et al.</i> , "Synthesis of 7- and 9β-D Psicofuranosylguanine and their 1' -Deoxy Derivatives", Collection of Czechoslovak Chemical Communication, Academic Press, London, GB, Vol. 39, 1974, pp. 2115-2123	
TM	BG	JOHNSON, <i>et al.</i> , "Nucleosides & Nucleotides -- 3'-C-TrifluoromethylRibonucleoside", Marcel Dekker, Inc., US, Vol. 14, no. 1/2, 1995, pp. 185-194	
TM	BH	LI, Nan-Sheng <i>et al.</i> , "2'-C-Branched Ribonucleosides. 2. Synthesis of 2'-C-β-Trifluoromethyl Pyrimidine Ribonucleosides, Organic Letters, Vol. 3, No. 7, 2001, pp. 1025-1028	
TM	BI	MATSUDA, A. <i>et al.</i> , "Radical Deoxygenation of Tert-Alcohols in 2'-Branched-Chain Sugar Pyrimidine Nucleosides :Synthesis and Antileukemic Activity of 2' -Deoxy-2' (S)-Methylcytidine" Chemical and Pharmaceutical Bulletin, Pharmaceutical Society of Japan, Tokyo, JP, Vol. 35, 1987, pp. 3967-3970	
TM	BJ	MATSUDA, A. <i>et al.</i> , "Nucleosides and Nucleotides. 94. Radical Deoxygenation of Tert-Alcohols in 1-(2-C-alkylpentafuranosyl) Pyrimidines : Synthesis of (2'S)-2-Deoxy-2'-C-Methylcytidine, an Antileukemic Nucleoside " Journal of Medicinal Chemistry, American Chemical Society. Washington, US, Vol. 34, 1991, pp. 234-239	
TM	BK	MIKHAILOV, S. N., <i>et al.</i> , "Synthesis and Properties of 3'-C-Methylnucleosides and their Phosphoric esters" Carbohydrate Research, Elsevier Scientific Publishing Company, Amsterdam, NL, Vol. 124, 1983, pp. 75-96	
TM	BL	MURAL, Y. <i>et al.</i> , "A Synthesis and an X-ray Analysis of 2' -C-, 3' -C- and 5' -C- Methylsangivamycins" HETEROCYCLES, Vol. 33, no. 1, 1992, pp. 391-404	

Examiner Signature	/Traviss McIntosh III/ (07/24/2006)	Date Considered	07/24/2006
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				Group Art Unit	1623
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				Attorney Docket Number	06171.105059 IDX 1017
	3	of	3		

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TM	CA	ONG <i>et al.</i> , "Synthesis of 3'-C-Methyladenosine and 3'-C-Methyluridine Diphosphates and their Interaction with the Ribonucleoside Diphosphate Reductase from <i>Corynebacterium Nephridii</i> " Biochemistry, American Chemical Society, Vol. 31, No. 45, 1992, pp. 11210-11215				
TM	CB	ROSENTHAL, A. <i>et al.</i> , "Branched-Chain Sugar Nucleosides. Synthesis of 3'-C-Ethyl (and 3'-C-Butyl) Uridine" Carbohydrate Research, Elsevier Scientific Publishing Company, Amsterdam, NL, Vol. 79, 1980, pp. 235-242				
TM	CC	SCHMIT, C., "Synthesis of 2'-Deoxy-2'- α -Monofluoromethyl and Trifluoromethyl Nucleoside" SYNLETT, Thieme Verlag, Stuttgart, DE, no. 4, 1994, pp. 241-242				
TM	CD	SHARMA P.K., <i>et al.</i> , "Synthesis of 3'-Trifluoromethyl Nucleosides as Potential Antiviral Agents" Nucleosides, Nucleotides And Nucleic Acids, Marcel Dekker, Ann Arbor, Mi, US. Vol. 19, no. 4. 2000, pp. 757-774				
TM	CE	TRONCHET <i>et al.</i> , (72) "Synthese et desamination enzymatique des, C-hydroxymethyl-3'-et, C-methyl-3'-beta-D-xylofurannosyl-9-adenines" Helvetica Chimica Acta, Vol. 62, 1979, pp. 689-695				
TM	CF	WOLF J. <i>et al.</i> , "New 2'-C-Branched-Chain Sugar Nucleoside Analogs With Potential Antiviral or Antitumor Activity, Synthesis" Georg Thieme Verlag, Stuttgart, DE, no. 8, August 1992 (1992-08), pp. 773-778				

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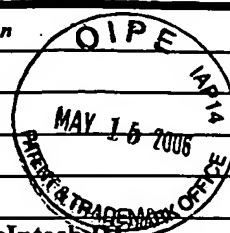
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				Application Number	10/609,298
				Filing Date	June 27, 2003
				First Named Inventor	LaColla
				Group Art Unit	1623
				Examiner Name	Traviss C. McIntosh III
				Attorney Docket Number	06171.105059 (IDX 1017)
Sheet	1	of	4		



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U.S. PATENT DOCUMENTS							
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/Relevant Figures Appear	T ⁶
		Number	Kind Code (if known)				
TM	AA	4,814,477		Wijnberg <i>et al.</i>	03-21-1989		
TM	AB	4,952,740		Sylvain <i>et al.</i>	08-28-1990		
TM	AC	5,223,263		Hostetler <i>et al.</i>	06-29-1993		
TM	AD	5,780,617		van den Bosch <i>et al.</i>	05-31-1994		
	AE	5,696,277		Hostetler <i>et al.</i>	12-09-1997		
	AF	5,763,418		Matsuda <i>et al.</i>	06-09-1998		
	AG	5,789,608		Glazier	08-04-1998		
	AH	6,172,046		Albrecht	01-09-2001		
	AI	6,252,060		Hostetler <i>et al.</i>	06-26-2001		
	AJ	2003/0008841		Devos <i>et al.</i>	08-07-2001		
	AK	6,277,830		Ganguly <i>et al.</i>	08-21-2001		
	AL	6,348,587		Schinazi <i>et al.</i>	02-19-2002		
	AM	2002/0055483		Watanabe <i>et al.</i>	05-09-2002		
	AN	2002/0055473		Ganguly <i>et al.</i>	05-09-2002		
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	AQ	6,448,392		Hostetler <i>et al.</i>	09-10-2002		
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	AT	6,472,373		Albrecht	10-29-2002		
	AU	6,495,677		Ramasamy <i>et al.</i>	12-17-2002		
	AV	2002/0198171		Schinazi <i>et al.</i>	12-26-2002		
	AW	2003/0008841		Devos <i>et al.</i>	01-09-2003		
	AX	2003/0050229		LaColla <i>et al.</i>	03-13-2003		
	AY	2003/0055013		Brass	03-20-2003		
	AZ	2003/0053986		Zahm	03-20-2003		
	AAA	2003/0060400		LaColla <i>et al.</i>	03-27-2003		
TM	AAB	2003/0087873		Stuyver <i>et al.</i>	05-08-2003		

Examiner Signature	/Traviss McIntosh III/ (07/24/2006)	Date Considered	07/24/2006
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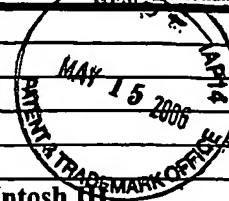
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Substitute for form 1449A/PTO <h2 style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center;">(use as many sheets as necessary)</p>		<div style="text-align: right; font-weight: bold;">Complete if Known</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>10/609,298</td> </tr> <tr> <td>Filing Date</td> <td>June 27, 2003</td> </tr> <tr> <td>First Named Inventor</td> <td>LaColla</td> </tr> <tr> <td>Group Art Unit</td> <td>1623</td> </tr> <tr> <td>Examiner Name</td> <td>Traviss C. McIntosh III</td> </tr> <tr> <td>Attorney Docket Number</td> <td>06171.105059 (IDX 1017)</td> </tr> </table>		Application Number	10/609,298	Filing Date	June 27, 2003	First Named Inventor	LaColla	Group Art Unit	1623	Examiner Name	Traviss C. McIntosh III	Attorney Docket Number	06171.105059 (IDX 1017)
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Examiner Name	Traviss C. McIntosh III														
Attorney Docket Number	06171.105059 (IDX 1017)														
2	of	4													



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Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/Relevant Figures Appear	T ⁶
		Number	Kind Code (if known)				
TM	BA	6,566,365		Storer <i>et al.</i>	05-20-2003		
	BB	6,573,248		Ramasamy <i>et al.</i>	06-03-2003		
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	BI	2004/0063658		Roberts <i>et al.</i>	04-01-2004		
	BJ	2004/0067901		Bhat <i>et al.</i>	04-08-2004		
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	BO	6,752,981		Erion <i>et al.</i>	06-22-2004		
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		Group Art Unit		1623	
		Examiner Name		Traviss C. McIntosh III	
		Attorney Docket Number		06171.105059 (IDX 1017)	
3		of		4	

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Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/ Relevant Figures Appear	T ⁶
		Office ³	Number	Kind Code ² (if known)				
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	CB	JP	06211890		Yamasa Shoyu Co. Ltd.	08-02-1994		
	CC	JP	06 228186		Yamasa Shoyu Co. Ltd.	08-16-1994		
	CD	WO	03/051899		Girardet <i>et al.</i>	06-26-2003		
	CE	WO	03/061385		An <i>et al.</i>	07-31-2003		
	CF	WO	03/061576		An <i>et al.</i>	07-31-2003		
	CG	WO	03/062256		An <i>et al.</i>	07-31-2003		
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	CJ	WO	03/105770		Bhat Balkrishen	12-24-2003		
	CK	WO	04/000858		Carroll <i>et al.</i>	12-31-2003		
✓	CL	WO	04/007512	A2	Merck & Co., Isis Pharmaceutical	01-22-2004		
TM	CM	WO	06/012440	A2	Wang <i>et al.</i>	02-02-2006		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ⁶
TM	CN	BIANCO A., <i>et al.</i> , "Synthesis of a New Carbocyclic Nucleoside Analog", <i>Tetrahedron Letters</i> , 38(36): 6433-6436, 1997		
TM	CO	CHIACCHIO U. <i>et al.</i> , "Stereoselective Synthesis of 2'-amino-2',3'-dideoxynucleosides by Nitron 1,3-Dipolar Cycloaddition: A New Efficient Entry Toward d4T and its 2-Methyl Analogue", <i>J. Org. Chem.</i> , 64: 28-36 (1999).		
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TM	CR	HASSAN, A.E.A., <i>et al.</i> , "Nucleosides and Nucleotides. 151. Conversion of (Z)-2'-(Cyanomethylene)-2'-Deoxyuridines into Their (E)-Isomers via Addition of Thiophenol to the Cyanomethylene Moiety Followed by Oxidative Syn-elimination Reactions", <i>J. Org. Chem.</i> , 61: 6261-6267 (1996).		
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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
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TM	DA	HOSSAIN N., et al., "Synthesis of 2'- And 3'-Spiro-Isoxazolidine Derivatives of Thymidine& Their Conversions To 2', 3'-Dideoxy-2', 3'-Didehydro-3'-C-Substituted Nucleosides by Radical Promoted Fragmentation", <i>Tetrahedron</i> , 49: 10133-10156 (1993).	
TM	DB	MAHMOUDIAN M. et al., "A Versatile Procedure for the Generation of Nucleoside 5-'Carboxylic Acids Using Nucleoside Oxidase", <i>Tetrahedron</i> , 54: 8171-8182 (1998).	
TM	DC	VELAZQUEZ, S., et al., "Synthesis of [1-[3',5'-bis-O-(tert-butyldimethylsilyl)-β-D-arabino- and β-D-ribofuranosyl]-2'-spiro-5''-(4''-amino-1'', 2''-oxathiole-2'', 2''-dioxide). Analogues of the Highly Specific Anti-HIV-1 agent TSAO-T", <i>Tetrahedron</i> , 50: 11013-11022 (1994).	

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